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RECENT ARENACEOUS FORAMINIFERS FROM GULF OF MEXICO

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ABSTRACT

Three new species of arenaceous foraminifers from bottom samples taken at water depths greater than 2,500 feet in the Gulf of Mexico are described. Two are referred to *Pseudotrochammina* FRERICHS, n. gen., and one to *Ammoglobigerinoides* FRERICHS, n. gen.

INTRODUCTION

During the summer of 1966 a series of sediment samples were collected in the Gulf of Mexico by Esso Production Research Company. Two new genera and three new species of arenaceous foraminifers were noted in these samples from the sea-bottom surface; this paper describes these new forms and records their environmental occurrence.

Acknowledgment is made to the Esso Production Research Company for permission to publish these data; to R. M. JEFFORDS, Esso Production Research Company, for counsel during preparation of the manuscript; and to T. H. MILLER of the same Company for photographic assistance.

SYSTEMATIC DESCRIPTIONS

The suprageneric classification of LOEBLICH & TAPPAN (1964) for the Foraminiferida is followed in the present report.

Family TROCHAMMINIDAE Schwager, 1877

Genus AMMOGLOBIGERINOIDES Frerichs, n. gen.

Test free, trochospirally coiled; wall arenaceous; aperture areal, elongate slit at base of last chamber with secondary apertural slit on spiral side at base of last chamber.

TYPE SPECIES.—*Ammoglobigerinoides dehiscens* FRERICHS, n. sp., from the Recent in the Gulf of Mexico.

AMMOGLOBIGERINOIDES DEHISCENS Frerichs, n. sp.

Test free, trochospiral; composed of 2.5 whorls with 3 chambers per whorl; chambers spherical, sutures strongly incised; primary aperture areal, at base of last chamber above suture separating earlier 2 chambers; a small ill-defined lip completely surrounds opening. Secondary aperture at base of last chamber and above sutures separating 2 previous chambers.

TYPE SPECIMEN.—U.S. Natl. Mus., no. 687466. Recent, sediment core from the Gulf of Mexico at lat. 26°55′ N, long. 92°20′ W; water depth, 5,994 feet.

OCCURRENCE.—This form occurs rarely but consistently in the Gulf of Mexico in water depths greater than 2,500 feet.

ILLUSTRATIONS.—Plate 1, figure 1; Plate 2, figure 1. Specimens from the Recent of the Gulf of Mexico.—— Pl. 1, fig. 1, type specimen, ×50; ventral views (1a-b), dorsal view (1c), and lateral view (1d).——Pl. 2, fig. 1, scanning electron microscope photographs of paratype from same sample as Pl. 1, fig. 1, ventral view (1a), ×180 and oblique dorsal view (1b), ×140.

Genus PSEUDOTROCHAMMINA Frerichs, n. gen.

Test free, trochospirally coiled; wall arenaceous, composed almost exclusively of cement; aperture areal, elongate, near and parallel to base of last chamber.

TYPE SPECIES.—*Pseudotrochammina triloba* FRERICHS, n. sp., from the Recent in the Gulf of Mexico.

PSEUDOTROCHAMMINA TRILOBA Frerichs, n. sp.

Test free, trochospiral, composed of 8 chambers in 2.5 whorls with 3.5 chambers per whorl; test wall composed almost exclusively of cement; dorsal side extremely low-spired, ventral side slightly umbilicate, chambers slightly compressed; aperture an elongate slit bordered by flange formed by slight production of chamber wall.

TYPE SPECIMENS.—U.S. Natl. Mus., no. 687467. Recent, sediment core from the Gulf of Mexico at lat. 26°54.5′ N, long. 92°17′ W; water depth, 5,010 feet.

OCCURRENCE.—This new species is somewhat rare but occurs consistently in the Gulf of Mexico in water depths greater than 4,000 feet.

ILLUSTRATIONS.—Plate 1, figure 3; Plate 2, figure 3. Specimens from the Recent in the Gulf of Mexico.——Pl. 1, fig. 3, type specimen, ×50; ventral views (3a-b), dorsal view (3c), and lateral view (3d).——Pl. 2, fig. 3, scanning electron microscope photographs of paratype from lat. 26°55′ N, long. 92°20′ W, water depth, 5,994 feet; ventral view (3a), ×215 and dorsal view (3b), ×200.

PSEUDOTROCHAMMINA MEXICANA Frerichs, n. sp.

Test free, small, trochospiral, composed of 13 chambers in 3 whorls with 4.5 chambers per whorl; test wall composed almost exclusively of cement; dorsal side somewhat high spired, ventral side umbilicate, chambers globose; aperture an elongate oval bordered by flange formed by slight production of chamber.

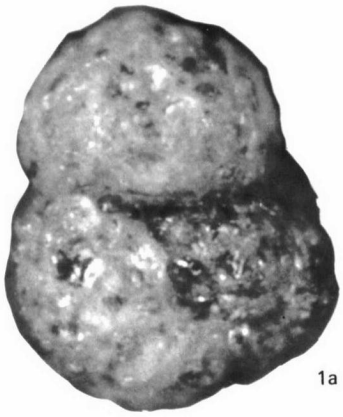
TYPE SPECIMEN.—U.S. Natl. Mus., no. 687468. Recent, sediment core from the Gulf of Mexico at lat. 26°54.5′ N, long. 92°17′ W; water depth, 5,010 feet.

OCCURRENCE.—This is a rare and sporadic form in the Gulf of Mexico. It has been observed in samples obtained from water depths greater than 2,500 feet.

ILLUSTRATIONS.—Plate 1, figure 2; Plate 2, figure 2. Specimens from the Recent of the Gulf of Mexico.——Pl. 1, fig. 2, type specimen; ventral view (2a), ×85, dorsal view (2b), ×100, and lateral view (2c), ×100. ——Pl. 2, fig. 2, scanning electron microscope photographs of paratype from lat. 26°55′ N, long. 92°20′ W; water depth, 5,994 feet, ×430; ventral view (2a) and dorsal view (2b).

REFERENCE

LOEBLICH, A. R., JR., & TAPPAN, HELEN, 1964, *Sarcodina, chiefly "Thecamoebians" and Foraminiferida,* in Moore, R. C. *(ed.),* Treatise on Invertebrate Paleontology, Geol. Soc. America and Univ. Kansas, Protista 2, pt. C: v. 1-2, 900 p., 653 fig.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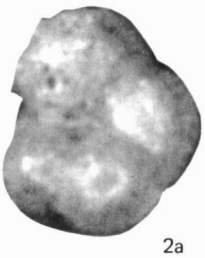
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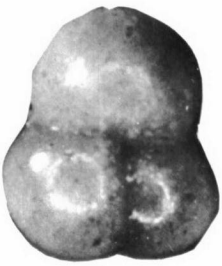
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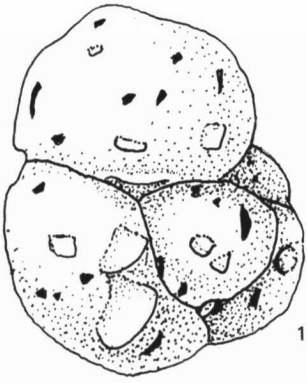
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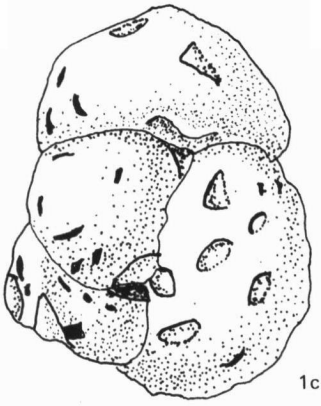
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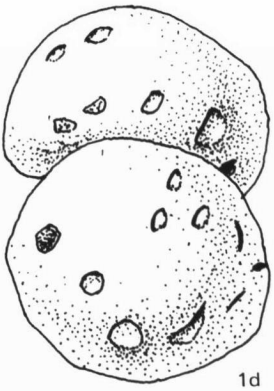
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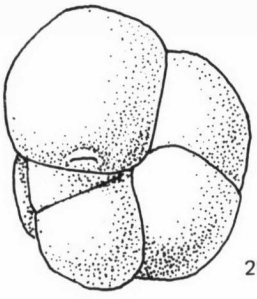
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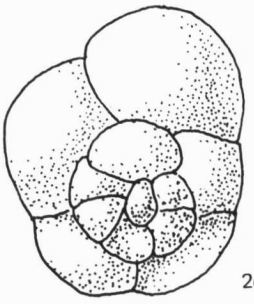
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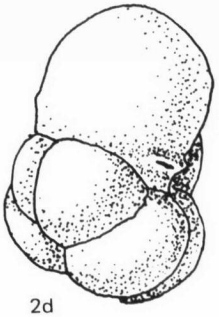
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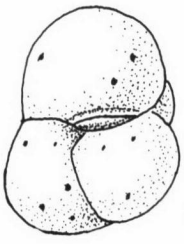
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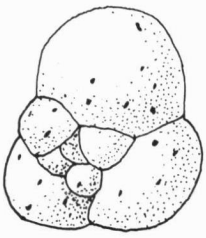
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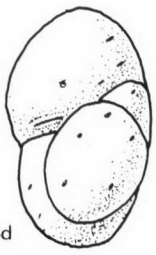
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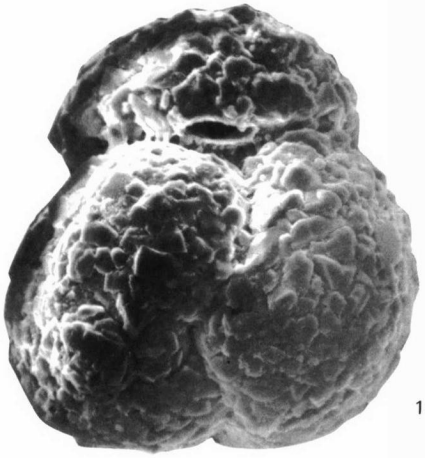

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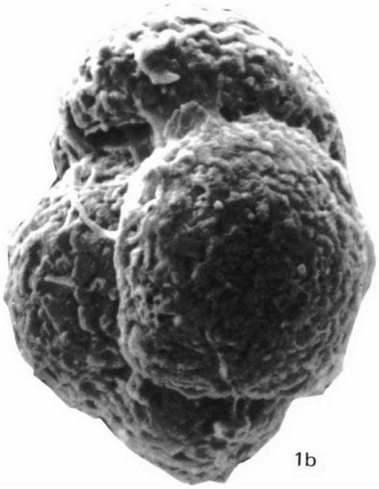

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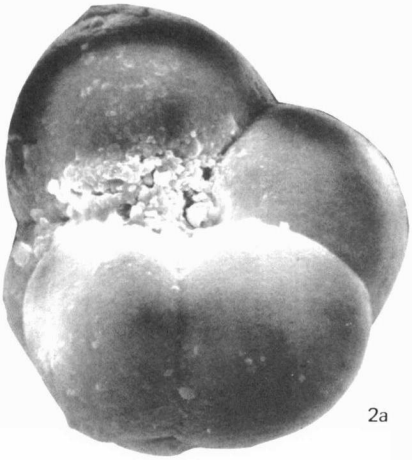

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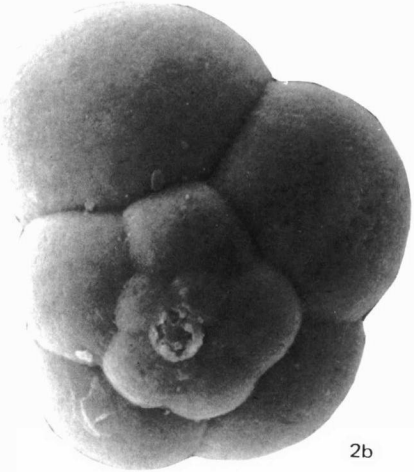

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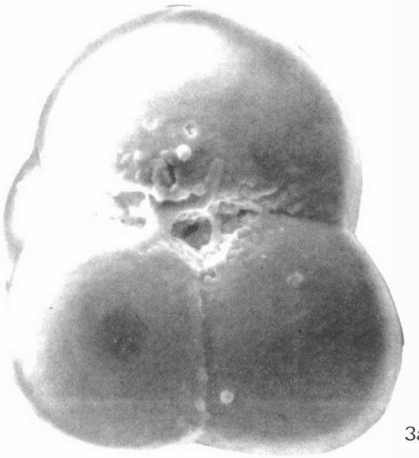

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